APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/086,627	05/29/98	BOLAND	V 7675

TM02/0418

JAMES M STOVER
INTELLECTUAL PROPERTY SECTION
LAW DEPARTMENT NCR CORPORATION
101 WEST SCHANTZ ECD 2
DAYTON OH 45479

EXAMINER
EDELMAN, B

ART UNIT	PAPER NUMBER
2153	

DATE MAILED:
04/18/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

	Application No.	Applicant(s)	
	09/086,627	Boland	
	Examiner	Art Unit	
	Bradley Edelman	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ___3___ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _Feb 23, 2001_____

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-5, 7, and 9-15_____ is/are pending in the applica

   4a) Of the above, claim(s) _____ is/are withdrawn from considera

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-5, 7, and 9-15_____ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirem

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

   a)☐ All b) ☐ Some* c) ☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   *See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Dung C. Dinh
Primary Examiner

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other:

DETAILED ACTION

This action is in response to the continued prosecution application filed on February 23, 2001. Claims 1-15 are presented for further examination. Claims 14 and 15 are new claims.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-5 and 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Culbert (U.S. Patent No. 5,838,968), in view of Sumimoto (U.S. Patent No., 5,522,070).

In considering claims 1, 11, 12, and 13, Culbert discloses a method, a computer architecture, a computer system, and an article comprising machine executable instructions, for allocating resources on a computer, comprising:

means for monitoring at least two resources on the computer among at least a first process and a second process for allocation of computer resources on the computer ("resource manager 170" - col. 6, line 51 - col. 7, line 12);

means for assigning a priority to each of the at least two processes, the second process being assigned a lower priority than the first process (col. 9, lines 24-36);

for the first process, means for setting a minimum resource allocation for the first process

independent of the computer resources needed by other processes running on the computer (col.

7, lines 49-51; col. 8, lines 33-37; col. 9, lines 35-36, 54-55; col. 11, lines 5-6; wherein a task

specifies a required amount of necessary resources that cannot be removed); and

means for redistributing computer resources on the computer so that the first process is

provided the minimum resource allocation should insufficient resources be available (col. 9, lines

36-54).

However, the system taught by Culbert does not disclose that the resources are distributed

across a network, including at least two nodes. Nonetheless, systems for managing resource

allocation for processes distributed across a network or multiple computers are well known, as

evidenced by Sumimoto (see Abstract). Given the teaching of Sumimoto, it would have been

obvious to a person having ordinary skill in the art to use the resource allocation scheme taught

by Culbert for processes and resources distributed throughout a network, as taught by Sumimoto,

so that the most important network distributed processes can be assured available resources.

In considering claim 2, Sumimoto further discloses the allocation being an allocation of

computers and memory space on the network for the first process (col. 17, lines 57-63).

In considering claim 3, Sumimoto further discloses denoting usage of resources as a

percentage (col. 16, lines 11-12). Therefore, it would have been obvious to denote the minimum

allocation, as taught by Culbert, as a percentage of the resources, to insure that a minimal amount of processing power on each resource is wasted.

In considering claim 4, Culbert further discloses performing the monitoring step periodically (col. 8, lines 47-48).

In considering claim 5, Culbert further discloses that monitoring of the resources is performed continually (col. 8, lines 53-57). Sumimoto further discloses denoting usage of resources as a percentage. Therefore, it would have been obvious to denote the minimum allocation, as taught by Culbert, as a percentage of the resources, to insure that a minimal amount of processing power on each resource is wasted.

In considering claim 9, Culbert further discloses storing the minimum resource allocation in a storage device (col. 8, lines 25-28; wherein the allocation is stored in the utilization records, which are inherently stored on a storage device).

In considering claim 10, Sumimoto further discloses monitoring being performed by any of the nodes on the computer network (Fig. 3, Fig. 22, col. 17, lines 57-60, "LM").

In considering claim 14, Culbert further discloses redistributing including removing a computer resource previously assigned to the second process (i.e. degrading) and reallocating the removed computer resource to the first process (col. 9, lines 15-47).

In considering claim 15, Culbert further discloses that the assigning step is performed irrespective of amounts of computer resources necessary for each of the at least two processes to run on the computer network (col. 9, lines 24-26; assigning priorities is not related to the minimum required resource).

3.   Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Culbert, in view of Sumimoto, and further in view of Hauser et al. (U.S. Patent No. 5,889,956, hereinafter "Hauser").

In considering claim 7, although the combined teaching of Culbert and Sumimoto discloses substantial features of the claimed invention, it fails to disclose setting a maximum resource allocation for the processes. Nonetheless, setting maximum resource allocation for processes using resources across a network is well known, as evidenced by Hauser. In a similar art, Hauser discloses a resource allocation system, which includes setting a maximum resource allocation for at least one process (col. 4, lines 53-56). Given the teaching of Hauser, a person having ordinary skill in the art would have readily recognized the desirability and advantages of including a maximum resource allocation, as taught by Hauser, in the system taught by Culbert

and Sumimoto so that no one process could overwhelmingly occupy the system's resources.

Therefore, it would have been obvious to include maximum resource allocation, as taught by

Hauser, in the system taught by Culbert and Sumimoto.

Response to Arguments

4.   Applicant's arguments with respect to claims 1-5, 7, and 9-15 have been considered but

are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Bradley Edelman whose telephone number is (703) 306-3041. The

examiner can normally be reached on Monday to Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Glen Burgess, can be reached on (703) 305-4792. The fax phone number for the organization

where this application or proceeding is assigned is (703) 305-7201.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-3900.

Dung C. Dinh
Primary Examiner

BE

April 12, 2001